NUCLEAR AND CHEMICAL WASTE MANAGEMENT

Volume 7, Number 1 1987

New Patents section in this issue

CONTENTS

Hazardous Waste Incineration Research

H.M. Freeman	1	Editorial: Hazardous Waste Incineration Research
F. Freestone, R. Hazel, I. Wilder, J. Brugger, J. Yezzi, R. Miller, C. Pfrommer, R. Helsel, E. Alperin	3	Evaluation of On-site Incineration for Cleanup of Dioxin-Contaminated Materials
W.D. Clark, W.R. Seeker, C.C. Lee	21	Engineering Analysis of Hazardous Waste Incineration Energy and Mass Balance
G.L. Huffman, L.J. Staley	29	The Formation of Products of Incomplete Combustion in Research Combustors
A.R. Trenholm, C.C. Lee	33	Analysis of PIC and Total Mass Emissions from an Incinerator
N.P. Kolak, T.G. Barton, C.C. Lee, E.F. Peduto	37	Trial Burns — Plasma Arc Technology
C.D. Wolbach, D. Van Buren, C. Castaldini	43	Characterization of Hazardous Waste Incineration Residuals
G.A. Vogel, A.S. Goldfarb, R.E. Zier, A. Jewell	53	Incinerator and Cement Kiln Capacity for Hazardous Waste Treatment
C. Castaldini, R. Chang, H. Lips, C. Pickett	59	Nonsteady-State Testing of Industrial Boilers Burning Hazardous Wastes
	67	Books Received
	69	Errata
	I	New Patents and Published Patent Applications from the United States and over 30 Other Countries
	VII	Software Survey Section

Volume 7, Number 2 1987

CONTENTS

A. Alan Moghissi	71	Editorial: Effects of Low Levels of Misinformation
R. C. Routson G. S. Barney C. H. Delegard R. M. Smith	73	Trace Cobalt Sorption on 21 Sediment Types from the Hanford Site, Washington
J. S. Boles K. Ritchie D. A. Crerar	89	Reducing the Potential for Migration of Radioactive Waste: Aqueous Thermal Degradation of the Chelating Agent Disodium EDTA
S. T. Hwang	95	Methods for Estimating On-Site Ambient Air Concentrations at Disposal Sites
Richard J. Bord	99	Judgments of Policies Designed to Elicit Local Cooperation on LLRW Disposal Siting: Comparing the Public and Decision Makers
S. G. Burnay	107	Comparative Evaluation of α and γ Radiation Effects in a Bitumenisate
Pierre L. Côté Thomas W. Constable Alan Moreira	129	An Evaluation of Cement-Based Waste Forms Using the Results of Approximately Two Years of Dynamic Leaching
G. H. Bryan R. W. Goles C. A. Knox D. E. Knowlton	141	Vitrification of TMI Decontamination Zeolite
Virginia M. Oversby	149	Important Radionuclides in High Level Nuclear Waste Disposal: Determination Using a Comparison of the U.S. EPA and NRC Regulations
W.G. Mathers K.B. Harvey	163	The Dissolution of a Glass in an Infinite Volume of Water
R. P. Anantatmula C. H. Delegard D. R. Duncan	167	Corrosion Behavior of Low-Carbon Steel in Ground Water-Basalt-Bentonite Mixtures at 250°C
		Book Review
Lucjan Pawlowski	175	*TrAC — Trends in Analytical Chemistry*, Reference Edition, Volume 4, 1985
	I	New Patents and Published Patent Applications from the United States and over 30 Other Countries
	III	Software Survey Section

Volume 7, Numbers 3/4 1987

CONTENTS

A. Alan Moghissi	177	Editorial: Engineering Design by Legislation
S. Y. Lee **T. Tamura** **E. H. Essington**	179	Characteristics of Radioactivity Contamination of Soil at the Nevada Test Site
Walton R. Kelly	191	A Modeling Study of Geochemical Interactions at the Sheffield, Illinois Low-Level Radioactive Waste Disposal Site
Claude W. Sill	201	Precipitation of Actinides as Fluorides or Hydroxides for High-Resolution Alpha Spectrometry
W. V. Abeele **J. W. Nyhan**	217	Emanation and Dispersal of Tritiated Water from Disposal Shafts
L. A. James	227	Environmentally Assisted Cracking Behavior of a Candidate Nuclear Waste Repository Container Material in Simulated Hanford Groundwater
C. W. Sill	239	Determination of Radium-226 in Ores, Nuclear Wastes and Environmental Samples by High-Resolution Alpha Spectrometry
Gerald A. Simiele **Robert A. Fjeld** **Carlton Robertson**	257	Radioactive Decontamination of Waste Oil by Filtration, Centrifugation, and Chelation
James E. Martin **Kenneth W. F. Howard** **Lawrence W. King**	265	Environmental Behavior of ^{14}C-Tagged Polyacrylate Polymer: Column Studies of Flow and Retardation in Sand
James E. Martin **Kenneth W. F. Howard** **Lawrence W. King**	273	Environmental Behavior of ^{14}C-Tagged Polyacrylate Polymer: Flow Tank Studies of Retention in Sand
	281	Books Received
	285	List of Contents and Author Index, Volume 7, 1987
	I	New Patents and Published Patent Applications from the United States and over 30 Other Countries
	VII	Software Survey Section